

REMARKS

INTRODUCTION:

In accordance with the foregoing, claims 1, 11, 25, and 28-33 have been amended, claim 17 has been canceled, and claim 34 has been added. No new matter is being presented, and approval and entry are respectfully requested.

Claims 1-16 and 18-33 are pending and under consideration.

REJECTIONS UNDER 35 U.S.C. §102:

In the Office Action, at page 2, item 3, the Examiner rejected claims 25 and 33 under 35 U.S.C. §102(e) as being anticipated by Charych et al. (U.S. Patent No. 5,478,998 - hereinafter Charych). The reasons for the rejection are set forth in the Office Action and therefore not repeated. Applicants traverse this rejection and respectfully request reconsideration.

Charych discusses an optical scanner with a hinge used to pivotably support the scan unit, but fails to teach or suggest, "wherein the adjusting portion includes a screw and an inclined surface in contact with the screw, wherein a linear movement of the screw across the inclined surface pivots the scan unit." The present invention allows the laser scan unit to move up or down by turning the screw forwards or backwards in contact with the inclined surface. The screw and the inclined surface work together to pivot the scan unit to position the laser beam into proper position. The manual adjustment found in the present invention allows the user to position the laser scan unit with precision. In contrast, the adjustment increments in Charych are limited to the range of 2-10 degrees, with the preferred angular pitch of 5 degrees (col. 4, lines 10-17). The present invention allows movement of the laser scan unit in the upward or downward direction without a restriction on adjustment increments.

The present invention adjusts the "linear movement of the screw across the inclined surface" by pivoting the scan unit without ratchets, teeth, or the undesirable audible clicking sound of the ratchets and teeth that is found in the prior art. Charych describes the use of the teeth in the ratchet elements (ref. 54, 56) that restrict movement of the scan unit to the range of 2-10 degrees. The present invention eliminates the use of the teeth of the ratchet by employing the screw and the inclined surface as an adjusting portion. Charych does not disclose, "wherein the adjusting portion includes a screw and an inclined surface in contact with the screw, wherein a linear movement of the screw across the inclined surface pivots the scan unit." Therefore,

Charych does not disclose claims 25 and 33.

On page 3, claims 1-2, 6, 11-12, 16, 25-26, 30 and 33 are rejected under 35 U.S.C. §102(e) as being anticipated by Okugawa et al. (U.S. Patent No. 6,600,504 – hereinafter Okugawa). Okugawa shows a laser assembly with a plurality of laser scan units. The present invention is directed to a laser scan unit assembly where the units are parallel to each other or easily adjusted to be parallel to each other. Okugawa teaches away from adjusting the laser scan units to position laser beams to be parallel with each other. Okugawa discusses “having a supporting shaft that is **almost in parallel** with an optical axis of the scanning optical system and adjusting an inclination in the primary scanning direction by rotating the exposure unit on the center of the supporting shaft” (col. 6, lines 14-22, *emphasis added*). Okugawa does not teach or suggest, “adjusting the laser scan units to position laser beams from said laser scan units to be parallel.” Therefore, Okugawa does not disclose the features of claims 1-2, 6, 11-12, 16, 25-26, 30 and 33.

REJECTION UNDER 35 U.S.C. §103:

On page 4, item 6, claims 3-4, 13-14, 21-22 and 32 that depend on independent claims 1, 11, and 25, are rejected under 35 U.S.C. §103(a) as being unpatentable over Okugawa in view of Kim (U.S. Patent No. 6,046,759). As discussed above, Okugawa fails to teach or suggest the features found in independent claims 1, 11, and 25. The Examiner acknowledged on page 5 of the Office Action that Okugawa does not teach or suggest “the hinge supporting portion being a groove to support the hinge shaft, and the groove having V-shape, and the resilient member to press the hinge shaft against the groove.” Claims 1 and 11 are amended to include “to position the laser beams from the laser scan units to be parallel.” Kim would not apply to claims 3-4, 13-14, and 21-22 because it is applicable to a single laser scan unit. Kim does not cure the deficiencies of Okugawa. Therefore, Kim does not teach or suggest “to position the laser beams from the laser scan units to be parallel.” Thus, Okugawa in view of Kim fail to teach or suggest dependent claims 3-4, 13-14, 21-22 and 32.

With respect to claim 32, none of the prior art teaches or suggests the feature of independent claim 25, “wherein the adjusting portion includes a screw and an inclined surface in contact with the screw, wherein a linear movement of the screw across the inclined surface pivots the scan unit.”

Withdrawal of the foregoing rejections is respectfully requested.

NEW CLAIM 34:

New claim 34 recites that the features of the present invention include "a hinge portion provided at a first side of the laser scan unit to pivotably dispose the laser scan unit on the printer body wherein said hinge portion is formed as a groove; (and) a hinge supporting portion that supports the groove." Nothing in the prior art teaches or suggests such. It is submitted that these new claims, which are different and not narrower than prior filed claims distinguishes over the prior art.

CONCLUSION:

In accordance with the foregoing, Applicants respectfully submit that all outstanding objections and rejections have been overcome and/or rendered moot, and further, that all pending claims patentably distinguish over the cited art. Thus, there being no further outstanding objections or rejections, the application is submitted as being in condition for allowance which action is earnestly solicited.

If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned agent for a telephone interview to discuss resolution of such issues.

If there are any underpayments or overpayments of fees associated with the filing of this Amendment, please charge and/or credit the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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